RECEIVED CENTRAL FAX CENTER APR 0 6 2010

## **Amendments to the Claims**

- 1. (Cancelled)
- 2. (Currently Amended) A process according to Claim 5 wherein the exposed purine <u>base is found within comprises</u> a structural form selected from the group consisting of single stranded region of nucleic acid, hairpins, loops and nucleic acid having modifications to the phosphate backbone.
- 3. (Currently Amended) A process according to Claim 5 wherein the technique comprises metal affinity.
- 4. (Currently Amended) A process according to Claim 5 wherein the captured nucleic acid <del>product</del> comprises single-strandedness.
- 5. (Currently Amended) A scalable process for the highly selective, high yield separation of a desired recombinant polymerase from undesired nucleic acid, comprising:

exposing purine bases present within either the desired nucleic acid product or undesired nucleic acid by a process selected from the group consisting of selective thermal denaturation and renaturation, alkaline denaturation, and restriction enzyme digestion yielding single-stranded overhangs;

capture of the desired <u>recombinant polymerase nucleic acid product or</u> undesired nucleic acid by a technique selective for the exposed purine bases single-strandness; and

separation of the desired <u>recombinant polymerase-product</u> from the undesired nucleic acid; wherein the desired product comprises recombinant polymerase.

- 6. (Currently Amended) A process according to Claim 5 wherein the <u>process</u> comprises exposed purine bases of single-stranded undesired (or desired) nucleic acids facilitate a separation step selected from the group consisting of immobilized metal affinity chromatography (IMAC).
- 7. (Currently Amended) A process according to Claim 5 comprising introducing single strandedness in the undesired nucleic acid-as an exposed purine base.
- 8. (Previously Presented ) A process according to Claim 5 comprising a thermally based process in which a nucleic acid contaminant is rapidly cooled to below 65°C and is captured by an affinity method.
- 9. [Previously Presented] A process according to Claim 5 performed after an alkali based process in which genomic DNA or other nucleic acid contaminant is rapidly neutralized and is captured by an affinity method.
- 10. (Cancelled)
- 11. (Currently Amended) A process according to Claim 5 wherein undesired other plasmid isoforms selected from the group consisting of open circular ("nicked") and linear plasmid isoforms are selectively removed from the desired supercoiled plasmid DNA product.
- 12. (Currently Amended) A process according to Claim 9 wherein undesired plasmid isoforms selected from the group consisting of open circular and

linear plasmid isoforms are selectively removed—from supercoiled plasmid DNA product.

- 13. [Cancelled]
- 14. (Previously Presented) A process according to Claim 5 in which the separation is achieved by adsorption on chelated metal.
- 15. (Previously Presented) A process according to Claim 5 in which the separation is achieved using multi-channel plates.
- 16. (Previously Presented) A process according to Claim 5 4 wherein the desired product comprises Taq polymerase.
- 17. (Previously Presented) A process according to Claim 5 in which the separation is achieved using magnetic particles.
- 18. (Previously Presented) A process according to Claim 5 in which the separation of multiple samples is achieved in parallel fashion.
- 19. (Previously Presented) A process according to Claim 5 in which the captured nucleic acid comprises a moiety selected from BACs, PACs and YACs.
- 20. (Previously Presented) A process according to Claim 5 in which the captured nucleic acid comprises a plasmid.
- 21. (Previously Presented) A process according to Claim 5 in which the captured nucleic acid comprises genomic DNA.

- 22. (Previously Presented ) A process according to Claim 5 in which the captured nucleic acid comprises RNA.
- 23. (Previously Presented) A process according to Claim 5 in which the capture technique comprises HIC.
- 24. (Previously Presented ) A process according to Claim 5 in which the capture technique comprises RPC.
- 25. Cancelled